# Chaetaglaea cerata (A Noctuid Moth)

Report Date: January 13, 2016

**Priority 2 Species of Greatest Conservation Need (SGCN)** 

Class: Insecta (Insects)

Order: Lepidoptera (Butterflies, Skippers, And Moths)

Family: Noctuidae (Noctuid Moths)

#### **General comments:**

Typically found in pitch pine barrens and open heath lands, which are not common in ME; no recent EOs despite moderate survey effort by Schweitzer and others; G3G4; evidence of historic decline globally; potentially could be found outside PP habitats – host plants (blueberry, scrub oak, Prunus) not limiting

### **Species Conservation Range Maps for A Noctuid Moth:**

Town Map: <u>Chaetaglaea cerata\_Towns.pdf</u>
Subwatershed Map: <u>Chaetaglaea cerata\_HUC12.pdf</u>

## **SGCN Priority Ranking - Designation Criteria:**

**Risk of Extirpation: NA** 

**State Special Concern or NMFS Species of Concern:** 

Chaetaglaea cerata is listed as a species of Special Concern in Maine.

**Recent Significant Declines: NA** 

**Regional Endemic: NA** 

High Regional Conservation Priority: NA High Climate Change Vulnerability: NA

**Understudied rare taxa: NA** 

**Historical:** 

Species currently listed as state (SH) or global (GH) historical (by MDIFW or NatureServe) that have some reasonable probability of rediscovery with further survey effort.

State Rank: SH, Global Rank: G3G4, Rounded Global Rank: G3, MDIFW Historical: Yes

**Culturally Significant: NA** 

## **Habitats Assigned to A Noctuid Moth:**

#### Formation Name Northeastern Upland Forest

Macrogroup Name Central Oak-Pine

Habitat System Name: Central Appalachian Dry Oak-Pine Forest Notes: potential; where host plants (scrub oak,

blueberry, Prunus spp., others) present

Habitat System Name: North Atlantic Coastal Plain Hardwood Forest Notes: potential; dry barrens and coastal heaths

with scrub oak

Habitat System Name: Northeastern Interior Pine Barrens \*\*Primary Habitat\*\* Notes: may be preferred habitat -

host plants (scrub oak, blueberry, Prunus spp., others) not limiting

Macrogroup Name Northern Hardwood & Conifer

Habitat System Name: Northeastern Coastal and Interior Pine-Oak Forest Notes: potential; where host plants (scrub

oak, blueberry, Prunus spp., others) present

## **Stressors Assigned to A Noctuid Moth:**

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

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IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Fire and Fire Suppression

Severity: Severe Actionability: Moderately actionable

Notes: Pine barren habitat is fire dependent - fire suppression can alter successional stage and habitat availability over

time; fire can cause direct mortality

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

**Severity:** Moderate Severity **Actionability:** Highly actionable

Notes: No modern EOs even though habitat present in ME - species potentially extirpated from unknown reason; lack of

comprehensive survey effort, including outside PPSO habitat, to identify additional occurrences and determine

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species status

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

Severity: Moderate Severity Actionability: Highly actionable

Notes: Nontarget species impacts from aerial pesticides; especially control efforts for gypsy moth in southern ME

IUCN Level 1 Threat Residential and Commercial Development

**IUCN Level 2 Threat:** Housing and Urban Areas

Severity: Severe Actionability: Moderately actionable

Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME

IUCN Level 1 Threat Agriculture and Aquaculture

IUCN Level 2 Threat: Annual and Perennial Non-timber crops

Severity: Moderate Severity Actionability: Moderately actionable

**Notes:** Some barren habitat is being converted to intensive blueberry production

IUCN Level 1 Threat Energy Production and Mining

**IUCN Level 2 Threat:** Mining and Quarrying

**Severity:** Moderate Severity **Actionability:** Moderately actionable

Notes: Habitat loss (e.g., sand and gravel extraction)

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Commercial and Industrial Areas

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME

IUCN Level 1 Threat Transportation and Service Corridors

IUCN Level 2 Threat: Roads and Railroads

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME

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Family: Noctuidae (Noctuid Moths)

**IUCN Level 1 Threat Other Options** 

> **IUCN Level 2 Threat:** Other Threat

> > Actionability: Actionable with difficulty Severity: Moderate Severity

Notes: Evidence of past global declines from unknown stressor

### **Species Level Conservation Actions Assigned to A Noctuid Moth:**

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

### Conservation Actions Associated with the Dry Barrens Lepidoptera Guild:

**Conservation Action** Category: Species Management **Biological Priority:** critical Type: new

Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.

#### Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

**Conservation Action Category:** Habitat Management **Biological Priority:** critical Type: new

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Conduct a statewide review of potential high quality barrens habitat that is threatened by succession and identify strategic habitat restoration actions for implementation by key conservation partners.

#### Stressor(s) Addressed By This Conservation Action

Fire and Fire Suppression

## **Broad Taxonomic Group Conservation Actions:**

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

#### **Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.